CLASSIFICATION OF THE GALL-WASPS AND THE PARASITIC CYNIPOIDS, OR THE SUPERFAMILY CYNIPOIDEA. II.

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Subfamily IV. — Liopterinae.

1894. Liopterinae, Subfamily IV, Ashmead, Proc. ent. soc. Washington, vol. 3, p. 17.

This group was first recognized as a subfamily by the writer about ten years ago, and I am surprised therefore, to see that Dr. von Dalla Torre takes credit for it in Wytsman's Genera Insectorum, Family Cynipidae, received January 27, 1903. He, and some other writers, placed the group in the subfamily ANACHARINAE, but its resemblance to that subfamily is merely superficial, the attachment of the abdomen, the abdomen itself, and the antennae being quite different.

In the publication quoted above I suggested that the group was probably an ancient phylum of the Cynipidae whence originated some of the Chalcidoidea, CHALCIS, EURYTOMA, etc. Since the suggestion was made additional evidence supporting it has been found in the African genus OBERTHÜRELLA Saussure, occurring in Madagascar and Liberia, a genus belonging to this group, not mentioned by Dalla Torre or by Kieffer, and which has the hind femora slightly swollen and armed with a tooth beneath, similar to some chalcidoids.

TABLE OF GENERA.

1. Head and thorax coarsely rugose; marginal cell closed
   Scutellum normal, not ending in a spine; hind femora unarmed . 2
   Scutellum ending in a long, acute spine; hind femora armed with a strong tooth beneath, before the middle; ♀ antennae 13-jointed, ♂ 14-jointed. (Africa.) . . . . . Oberthürella Saussure.
   (Type O. lenticularis Sauss.)
2. Discoidal nervure interstitial with the median nervure; ♀ antennae 13-jointed, ♂ 14-jointed . . . . . Liopteron Perty.
   (Type L. compressum Perty.)
   Discoidal nervure *not* interstitial with the median nervure but issuing from the transverse median nervure; ♀ unknown, ♂ antennae 13-jointed, clavate Peras Westwood.
   (Type P. niger Westw.)

Subfamily V. — Eucoilinae.

1861. Eucoilidae, Familia, Thomson, Öfvers. vet. akad. forhl. no. 9, p. 397.
1869. Eucoeloidae, Familie 4, Förster, Verh. zool.-bot gesell. Wien, vol. 19, p. 329, 341.

This group is without doubt the largest and most widely distributed of any in the family Figitidae, the genera and species being exceedingly numerous although but little studied. As soon as the attention of entomologists is directed to the collecting of these obscure wasps and especially in tropical countries we may expect the discovery of many new genera, as is clearly shown by the new genera described here, most of which were recognized in a small collection of these insects taken by Mr. Herbert H. Smith in South America.

The subfamily is at once recognized by the cup-like elevation on the scutellum and by the hind tibiae having two apical spurs, characters not found in any other group.

Table of Genera.

Females 1
Males 61

1. Metathorax normal, not produced, the abdomen at most subsessile — (Tribe II Eucoilinae.) 3

   Metathorax produced into a long neck, the length of the hind coxae, the abdomen abnormally petiolated, the petiole being long and slender, longer than the thorax. (Tribe I. Zamischini.) 2

2. Body of abdomen not large, compressed; ♀ antennae long, 13-jointed, thickened toward apex, slender basally, the third joint shorter than the fourth. (Brazil.)

   Zamischus Ashmead, gen. nov.
   (Type Z. brasiliensis Ashm.)

3. Base of abdomen *with* a hairy girdle 15

   Base of abdomen bare, *without* a hairy girdle

   Mesonotum *with* parapsidal furrows 4

   Mesonotum *without* parapsidal furrows 9

4. Parapsidal furrows distinct to base of scutellum 5

   Parapsidal furrows *not* distinct to base of scutellum, converging and meeting *before* reaching the scutellum, thence to base of scutellum as a delicate carina; cup of scutellum large, marginal cell closed; antennae 13-jointed

   Eucoilidia Ashmead
   (Type E. canadensis Ashm.)

5. Parapsidal furrows converging and meeting at the base of the scutellum 6
Parapsidal furrows almost parallel, or some distance apart to the base of the scutellum 7

6. Marginal cell *closed* along the front margin . . Gronotoma Förster
(Type G. sculpturata Först.)
Marginal cell *open* along the front margin . . Diglyphosema Förster
(Type D. eupatorii Först.)

7. Marginal cell *open* along the front margin 8
Marginal cell *closed* along the front margin
Cup of scutellar large, rounded, its disk concave; antennae 13-jointed, long, subfiliform, only slightly and gradually thickened towards apex
Microstilba Förster
(Type M. bidentata Förster)

8. Mesonotum with *five* carinae; cup of scutellum large, oval or rounded; antennae 13-jointed, filiform, joints 4–12 long oval. (South America.)
Tropideucoela Ashm., gen. nov.
(Type T. rufipes Ashm.)
Mesonotum *without* carinae; cup of scutellum large; antennae 13-jointed, without a distinct club . . . . . Disorygma Förster
(Type D. divulgata Först.)

9. Marginal cell *open* along the front margin 10
Marginal cell *closed* along the front margin 13

10. Scutellum normal, unarmed 11
Scutellum abnormal, armed with *two* horns behind
Antennae 13-jointed, ending in a 6-jointed club
Dicerataspis Ashmead
(Type D. grenadensis Ashm.)

11. Antennae ending in an abrupt club, which is *three* or more jointed . 12
Antennae at most subclavate, without a distinct, abrupt club
Ectolyta Förster
(Type Cothonaspis incressata Thoms.)

12. Club of antennae 3-jointed . . . . . Triplasta Kieffer
(Type Kleidotoma atrocoxalis Ashm.)
Cup of antennae 5-jointed . . . . . Pentaplasta Kieffer
(Type Pentacrita coxalis Ashm.)

13. Antennae ending in a distinct, abrupt club 14
Antennae without a distinct club . . . Erisphagia Förster
(Type Eucoila curta Gir.)

14. Club of antennae 5-jointed (rarely 6-jointed)
Apex of front wings entire . . . . . Psilosema Kieffer
= Cothonaspis Thomson Förster
(Type C. pentatoma Thoms.)
Apex of front wings emarginate or excised . Schizosema Kieffer
(Type Eucoila emarginata Hartig.)

15. Front wings at apex *emarginate* or *excised*; apical abscissa of the submarginal vein stout, quadrate, at the most only a little longer than thick . . . 16
Front wings at apex *entire*, never emarginate or excised although sometimes shortened and truncate; apical abscissa of the submarginal vein slender, not stout, always two or more times longer than thick 23

16. Marginal cell *open* along the front margin 17
Marginal cell *closed* along the front margin
Club of antennae 6- or 7-jointed . . . . Leptopelina Förster
(Type Eucoila longipes Hartig.)

17. Antennae ending in a distinct, abrupt club 18
Antennae filiform or subfiliform, *not* ending in a distinct club
Arhoptra Kieffer
(Type Eucoila melanopoda Cam.)

18. Club of antennae more than 3-jointed 20
Club of antennae 3-jointed
Scutellum normal, *not* produced into a beak at apex . . . 19
Scutellum abnormal, produced into a beak or horn at apex; funicle joints 2–7 small, moniliform . . . . . Rhynchacis Förster
(Type Cothonaspis niger Hartig.)

19. Wings extending far beyond tip of abdomen . . Kleidotoma Westwood
= Trirhoptrasema Kieffer[1]
(Type K. psiloides Westw.)

20. Club of antennae more than 4-jointed 21
Club of antennae 4-jointed . . . . . Tetrarhoptra Förster
(Type T. tetratoma Först.)

21. Club of antennae more than 5-jointed 22
Club of antennae 5-jointed . . . . . Pentacrita Förster
(Type Eucoila cordata Gir.)

22. Club of antennae 6-jointed . . . . . Hexacola Förster
(Type Kleidotoma hexatoma Thoms. = Hexacola picea Först.)

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[1] Kieffer proposes this genus for my *Kleidotoma americana*, which, however, is a true *Kleidotoma*. I am probably responsible for the Abbé's error by describing through a *lapsus pennae* the marginal cell as being closed, when it is really more or less *open* along the fore margin.

Club of antennae 7-jointed . . . . . Heptameris Förster
(Type Eucoila pygmea Thoms.)

23. Wings abbreviated and much narrowed 24
Wings not abbreviated, fully developed and always extending far beyond the tip of the abdomen 28

24. Club of antennae *less* than 7-jointed 25
Club of antennae 7-jointed . . . . . Nedinoptera Förster
(Type Eucoila holophila Thomson)

25. Metapleura bare, *without* a hairy cushion 26
Metapleura covered *with* a hairy cushion
Marginal cell *not* fully developed, the first abscissa of the radius alone present, or *longer* than the second when the latter is present
Glauraspidia Thomson
(Type G. parva Thomson.)
Marginal cell fully developed, the first abscissa of the radius *shorter* than the second . . . . . Apistophyza Förster
(Type Eucoila microptera Hartig.)

26. Wings extending at least to the middle of the abdomen, and usually *with* a marginal cell 27
Wings *not* extending beyond the base of the abdomen, and *without* a marginal cell; club of antennae 3-jointed . . . . Aphyoptera Förster
(Type A. inustipennis Förster)

27. Wings shorter than the abdomen, the marginal cell closed
Agroscopa Förster
(Type A. helgolandica Först.)
Wings as long as the abdomen, the marginal cell present but *open* along the front margin; club of antennae 5-jointed . . . Aphiloptera Förster
(Type A. anisomera Först.)

28. Antennae 11-, 12-, or 13-jointed 29
Antennae 14-jointed
Wings bare, glabrous . . . . Macrocereucoila Ashmead
(Type M. longicornis Ashm.)
Wings pubescent ciliate
Antennae filiform, without a distinct club, the third joint longer than the fourth . . . . . Episoda Förster
(Type E. xanthoneura Först.)

29. Antennae 11-jointed, *filiform* (South America.) Promiomoera Ashm., gen. nov.
(Type P. filicornis Ashm.)
Antennae 12- or 13-jointed

Antennae 12-jointed 30
Antennae 13-jointed 32

30. Marginal cell *closed* along the front margin 31
Marginal cell *open* along the front margin . . Idiomorpha Förster
(Type I. melanocera Först.)

31. Cup of scutellum large, rounded, the whole disk impressed or concave; antennae filiform, the third joint the longest, or without an abruptly defined club
Miomoera Förster
(Type M. aberrans Först.)

Cup of scutellum large oval, the whole disk not impressed, anteriorly flat, posteriorly with a fovea, with small punctures bordering the margin; antennae ending in an abrupt 7-jointed club . . Paramiomoera Ashmead
(Type P. heptoma Ashm.)

32. Marginal cell *closed* along the front margin 33
Marginal cell *open* along the front margin 50

33. Wings pubescent, the margins fringed or ciliated 34
Wings bare, glabrous, not pubescent or ciliated
Antennae subfiliform not ending in a distinct club, although slightly thickened toward apex, the third joint a little longer than the fourth
Eucoila Westwood.
= Psilodora Förster
(Type E. crassinervis Westw.)

34. Abdomen not unusually compressed, the hypopygium not prominent; second joint of the flagellum usually *shorter* than the first, rarely as long or a little longer 36
Abdomen usually strongly compressed at the sides, the hypopygium most frequently prominent, plow-share shaped; second joint of the flagellum always distinctly *longer* than the first.
Scutellum ending in a spine 35
Scutellum normal
Antennae long, without a distinct club . Hypolethria Förster
(Type Cothonaspis melanoptera Hartig.)

35. Antennae long, gradually thickened toward apex, the third joint only about two thirds the length of the fourth, 4 to 6 long, cylindrical (South America.)
Odonteucoila Ashmead, gen. nov.
(Type O. chapadae Ashm.)

36. Scutellum not ending in a spine 37
Scutellum ending in a spine
Antennae long, gradually thickened towards apex, the third joint much shorter than the fourth . . . . Odontoeucoila Ashmead

37. Flagellar joints *all* long and cylindrical, the last 7 or 8 joints, however, are sometimes stouter and form sometimes a more or less well defined club; first abscissa of the radius distinctly shorter than the second 38

Flagellar joints *not* all long and cylindrical, some oblong oval, ellipzoidal, or moniliform 40

38. Scutellum normal, the cup not modified into a carina 39

Scutellum abnormal, the axillae acutely toothed posteriorly, the cup modified into a carina which is gradually dilated posteriorly, appearing tridentate; antennae long, filiform, the flagellar joints long, cylindrical, the first joint of the flagellum not quite so long as the second (South America.)

Trissodontaspis Ashmead, gen. nov.
(Type T. rufipes Ashm.)

39. Head and thorax finely coriaceous, not polished, the scutellum with two large oblong foveae at base, the cup narrowed ellipzoidal, connected with a carina anteriorly; antennae long, subfiliform slightly and gradually thickened toward apex, the flagellar joints long, cylindrical, the first shorter than the second, third, or fourth which are about equal, the fifth and beyond a little thicker and shorter. (South America.) . . . . . Dieucoela Ashmead, gen. nov.
(Type D. subopaca Ashm.)

Head and thorax smooth, shining, the scutellum with a large oval or round cup; first three joints of flagellum much elongated, and slenderer than the following . . . . . Aglaotoma Förster
(Type Cothonaspis codrunus Först.)

40. Mesonotum *without* furrows or lines 41

Mesonotum *with* furrows or grooved lines.

Marginal cell rather short and broad, the second abscissa of the radius curved . . . . . Chrestosema Förster
(Type C. erythrapum Först.)

41. Cup of scutellum excavated, smooth in front, the anterior part closed, posteriorly with a fovea 42

Cup of scutellum flattened, neither excavated nor margined, slightly arched; metathorax smooth; antennae filiform . . . Ganaspis Förster
(Type G. mundata Först.)

42. Cup of scutellum not extending over the tip of the scutellum; antennae usually *with* a more or less distinct club 43

Cup of scutellum greatly elevated above the tip of the scutellum; antennae *without* a distinct club, usually long . . . . . Psichara Förster
(Type Cothonaspis longicornis Hartig.)

43. First and second abscissae of the radius not nearly equal in length, the first most frequently much shorter than the second 44

First and second abscissae of the radius equal in length or very nearly

Antennae usually with a 7- or 8-jointed club, the joints elongate, cylindrical, the first joint of the flagellum shorter than the second; cup of scutellum usually small . . . . . Rhoptromeris Förster
(Type Cothonaspis eucera Hartig.)

44. Marginal cell not short, much longer than wide 45
Marginal cell rather short, hardly longer than wide, the second abscissa of the radius curved outwardly (South America.)
Zaeucoela Ashmead, gen. nov.
(Type Z. unicarinata Ashm.)

45. Antennae *with* an abruptly defined club; cup of scutellum usually small, narrowed, ovate or ellipzoidal, rarely large oval 46
Antennae *without* an abruptly defined club, filiform or nearly, or only slightly, incrassated toward apex . . . Pseudoeucoila Ashmead, gen. nov.
= Eucoila Auctore.
(Type Cothonaspis trichopsila Hartig.)

46. Club of antennae 7-jointed or less 47
Club of antennae 8-jointed.

Flagellum with joints 2 and 3 very small, together scarcely as long as the first . . . . . Dimicrostrophis Ashmead
(Type D. ruficornis Ashm.)

47. Club of antennae 6-jointed or less 48
Club of antennae 7-jointed.

Flagellum with joints 2 and 3 not small, neither much shorter than the first . . . . . Heptamerocera Ashmead
(Type H. robusta Ashm.)

48. Club of antennae 5-jointed or less 49
Club of antennae 6-jointed . . . . . Hexamerocera Kieffer
(Type Eucoila rufiventris Gir.)

49. Club of antennae 5-jointed . . . . Pentamerocera Ashmead.
(Type P. angularis Ashm.)
Club of antennae 4-jointed . . . . Tetramerocera Ashmead
(Type T. variabilis Ashm.)

50. Marginal cell *closed* at base, the apical abscissa of the submarginal vein distinct 51
Marginal cell *open* at base or confluent with the costal cell, the apical abscissa of the submarginal vein wanting

Second abscissa of the radius usually wanting or much abbreviated; scutellum at apex normal . . . . . Adieris Förster
(Type A. reclusa Först.)

Second abscissa of the radius distinct; scutellum at apex usually emarginate and obtusely bidentate . . . . . Piezobria Förster
(Type P. bicuspidata Först.)

51. Wings pubescent, ciliate 52
Wings bare, glabrous, not ciliate.
Antennae 13-jointed . . . . . Lytosema Kieffer
(Type Eucoila guérinii Dahlb.)

52. Abdomen not unusually compressed, the hypopygium not very prominent 53
Abdomen much compressed, the hypopygium prominent plow-share shaped; antennae long, subfiliform, the joints elongate; cup of scutellum narrowed, ellipzoidal; cubitus in front wings more or less distinct Pilinothrix Förster
(Type P. designata Först.)

53. Front wings with the cubitus *wanting* 54
Front wings with the cubitus *present*, distinct
Antennae filiform, without a distinct club . . Anectoclis Förster
(Type A. indagatrix Först.)
Antennae subclavate or clavate more or less thickened toward apex, the joints submoniliform . . . . . Cothonaspis Hartig
= Trybliographa Förster
(Type Cothonaspis scutellaris Hartig.)

54. Cup of scutellum normal, not ending in a spine 55
Cup of scutellum abnormal, ending in a long spine
Acantheucoela Ashmead
(Type Cynips armatus Cresson.)

55. Cup of scutellum not large 56
Cup of scutellum large oval or rounded
Antennae clavate, the club not abruptly defined but more than 6-jointed . . . . . Diranchis Förster
(Type D. copulata Först.)

56. Club of antennae distinct, abruptly defined, 3- to 7-jointed . . . 57
Club of antennae not abruptly defined; cup of scutellum small, narrowed ellipzoidal; first two joints of flagellum very slender, shorter than the following . . . . . Hypodiranchis Ashmead
(Type H. hawaiiensis Ashm.)

57. Club of antennae 6-jointed or less 58
Club of antennae 7-jointed . . . . . Heptaplasta Kieffer
(Type Heptamerocera aliena Ashm.)

58. Club of antennae 5-jointed or less 59

Club of antennae 6-jointed . . . . . Hexaplasta Förster
= Didyctium Riley
(Type Cothonaspis hexatoma Hartig.)

59. Club of antennae 4-jointed or less 60
Club of antennae 5-jointed . . . . . Pentarhoptra Kieffer
(Type Eucoila tomentosa Giraud)

60. Club of antennae 4-jointed . . . Tetraplasta Ashm., gen. nov.
(Type T. unica Ashm.)
Club of antennae 3-jointed . . . . . Eutrias Förster

61. Metathorax produced into a long neck the length of the hind coxae, the abdomen abnormally petiolated, the petiole long and slender, longer than the thorax
Zamischus Ashm.
Metathorax normal not produced, the abdomen subsessile.
Abdomen at base bare, *without* a hairy girdle 62
Abdomen at base *with* a hairy girdle 73

62. Mesonotum *with* parapsidal furrows 63
Mesonotum *without* parapsidal furrows 68

63. Parapsidal furrows distinct to base of scutellum 64
Parapsidal furrows *not* distinct to base of scutellum, converging and meeting before reaching the base of the scutellum, thence to base as a delicate carina; marginal cell closed; antennae 15-jointed . . Eucoilidea Ashmead

64. Parapsidal furrows converging and meeting at the base of the scutellum 65
Parapsidal furrows almost parallel or some distance apart to the base of the scutellum 67

65. Marginal cell *closed* along the front margin; cup of scutellum large; antennae 15-jointed, the first flagellar joint longer than the second, excised towards base
Gronotoma Förster
Marginal cell *open* along the front margin; antennae 15-jointed
Diglyphosema Förster

66. Marginal cell *open* along the front margin 67
Marginal cell *closed* along the front margin
Cup of scutellum large, rounded, its disk concave; antennae 15-jointed, the third joint longer than the second, strongly excised
Microstilba Förster

67. Mesonotum *with* 5 carinae . . . . Tropideucoela Ashmead
Mesonotum *without* carinae . . . . . Disorygma Förster

68. Marginal cell *open* along the front margin 69
Marginal cell *closed* along the front margin 71

69. Scutellum normal, unarmed 70
Scutellum abnormal, armed with two horns behind Diceratapsis Ashmead

70. Unknown (♀ only known) . . . . . Triplasta Kieffer
Pentaplasta Kieffer
Ectolyta Förster

71. First joint of flagellum shorter than the fourth, the latter the stouter . 72
First joint of flagellum not longer than the fourth, the following slightly and gradually increasing in length . . . . . Erisphazia Förster

72. Apex of wings entire not emarginate . . . . Psilosema Kieffer
Apex of wings emarginate . . . . . Schizosema Kieffer

73. Front wings at apex *emarginate* or *excised*; apical abscissa of the submarginal vein stout, quadrate, at the most only a little longer than thick . 74
Front wings at apex *entire*, never emarginate or excised, although sometimes shortened and truncate; apical abscissa of the submarginal vein slender, not stout, always two or more times longer than thick 79

74. Marginal cell *open* along the front margin 75
Marginal cell *closed* along the front margin . . Leptopelina Förster

75. Scutellum normal, not produced into a beak at apex 76
Scutellum abnormal, produced at apex into a beak or horn
Rhynchacis Förster

76. First joint of the flagellum not or scarcely longer than the second, rarely curved, and hardly as thick as the second 77
First joint of the flagellum a little longer than the second, stouter and usually slightly curved, the following joints cylindrical, usually three or more times longer than thick and gradually but imperceptibly increasing in length to the penultimate . . . . . Kleidotoma Westwood

77. Joints of flagellum long, cylindrical, equal in length or very nearly, and at least four times as long as thick . . . . . Tetrarhoptra Förster
Joints of flagellum differently formed 78

78. Flagellar joints 1 to 3 equal in length or very nearly, the first slightly curved, clavate, the apical joints not or rarely more than three times as long as thick
Pentacrita Förster
Flagellar joint 1 scarcely as long as the second or distinctly shorter, the following joints stouter, fully thrice as long as thick . Hexacola Förster
Unknown . . . . . Heptameris Förster

79. Wings abbreviated 80
Wings fully developed 83

80. Metapleura bare or at most very sparsely pubescent 81
Metapleura clothed with a *dense* pubescence
Marginal cell incomplete, the second abscissa of the radius wanting or very short . . . . . Glauraspidia Thomson

Marginal cell completely formed, the first abscissa of the radius shorter than the second . . . . . Apistophyza Förster

81. Wings reaching at least to the middle of the abdomen, and *with* a marginal cell 82

Wings not reaching beyond the base of the abdomen, and *without* a marginal cell

Antennae 15-jointed, the first joint of the flagellum distinctly longer than the second, excised, the following not quite twice as long as thick

Aphyoptera Förster

82. Wings shorter than the abdomen, the marginal cell closed

Agroscopa Förster

Wings as long as the abdomen, the marginal cell open along the front margin, the first abscissa of the radius longer than the second

Aphiloptera Förster

83. Antennae 13- to 15-jointed 84

Antennae 16-jointed, very long, the flagellar joints long, cylindrical

Wings glabrous, the marginal cell closed Macrocereucoila Ashmead

(Type M. longicornis Ashm.)

Wings pubescent, the marginal cell closed . . Episoda Förster

84. Antennae 15-jointed 87

Antennae 13- or 14-jointed

Antennae 14-jointed 85

Antennae 13-jointed

Flagellum long, filiform, the joints long, cylindrical, the first joint only about half as long as the second ; cup of scutellum large, rounded

Promiomoera Ashmead, gen. nov.

(Type P. filicornis Ashm.)

85. Marginal cell *closed* along the front margin 86

Marginal cell *open* along the front margin . . Idiomorpha Förster

86. Cup of scutellum large, rounded, the whole disc concave Miomoera Förster

Cup of scutellum large oval the whole disc not concave, anteriorly flat, posteriorly with a fovea . . . . . Paramiomoera Ashmead

87. Marginal cell *closed* along the front margin 88

Marginal cell *open* along the front margin 101

88. Wings pubescent, the margins fringed or ciliated 89

Wings bare, glabrous, *without* a marginal fringe

Antennae long, filiform, the joints cylindrical . Eucoila Westwood

89. First abscissa of the radius distinctly shorter than the second . . 90

First abscissa of the radius as long as the second

First joint of the flagellum distinctly shorter than the second
Hypolethria Förster

First joint of the flagellum as long or nearly as long as the second
Rhoptromeris Förster

90. Scutellum normal, or at least not ending in a spine 91
Scutellum ending in a spine . . . . . Odonteucoila Ashmead

91. First joint of the flagellum usually longer than the second, more rarely equal in length, or very slightly shorter 92
First joint of the flagellum very distinctly shorter than the second
Heptamerocera Ashmead

92. Scutellum normal, the cup not modified into a carina 93
Scutellum abnormal, the axillae acutely toothed posteriorly, the cup modified into a carina which is gradually dilated posteriorly, appearing tridentate
Trissodontaspis Ashmead

93. Head and thorax smooth and shining 94
Head and thorax not smooth and shining, but finely coriaceous; scutellum with two large foveae at base, the cup narrowed ellipzoidal, connected with a carina anteriorly; antennae long, the joints long, cylindrical, the first joint of the flagellum not longer or thicker than the second, the eighth and beyond slightly shortening . . . . . Dieucoela Ashmead

94. First joint of the flagellum not greatly elongated, thickened, or strongly curved 95
First joint of the flagellum usually greatly elongated, much thickened and curved . . . . . Aglaotoma Förster

95. Marginal cell short nearly as wide as long, the second abscissa of the radius strongly curved outwardly; cup of scutellum very large 96
Marginal cell not especially short, always much longer than wide; mesonotum without furrows 98

96. Mesonotum short, *without* furrows 97
Mesonotum *with* two fine furrows abbreviated posteriorly and two very broad lateral impressions shortened anteriorly . . . Chrestosema Förster

97. Mesonotum *with* a very delicate median carina; cup of scutellum very large oval; first joint of the flagellum not longer than the second, the joints oblong oval, about thrice as long as thick . . . . Zaeucoela Ashmead, gen. nov.
(Type Z. unicarinata Ashm.)
Mesonotum *without* a median carina; cup of scutellum large rounded, the disk flat or slightly impressed; first joint of the flagellum longer than the second (or rarely shorter and slenderer), the following joints oval or moniliform hardly longer than thick or at most only about twice as long as thick, never thrice as long as thick . . . . . Ganaspis Förster

98. Cup of scutellum normal 99
Cup of scutellum overlapping the apex of the scutellum Psichara Förster
99. First joint of the flagellum not longer than the second or only a little longer 100
First joint of the flagellum very distinctly longer than the second, the following joints from 2½ to 3 times as long as thick . Hexamerocera Kieffer
100. Flagellar joints long, cylindrical, four or more times longer than thick Pseudeucoila Ashmead
Flagellar joints at the most thrice as long as thick or even shorter Pentamerocera Ashmead
101. Marginal cell confluent with the costal cell, the apical abscissa of the submarginal vein wanting 102
Marginal cell *not* confluent with the costal cell, the apical abscissa of the submarginal vein always present 103
102. Second abscissa of the radius wanting or not extending to the costa, the marginal cell therefore open at apex . . . . . Adieris Förster
Second abscissa of the radius distinct, reaching the costa; first joint of the flagellum more than twice the length of the second; the second and following moniliform . . . . . Piezobria Förster
103. Cubitus in front wings always more or less present or distinct . . 104
Cubitus in front wings obliterated or wanting 106
104. Wings pubescent, ciliate 105
Wings bare, glabrous, not ciliate . . . . Lytosema Kieffer
105. Cup of scutellum narrowed, ellipzoidal; first joint of flagellum very long, slightly curved, as long as 2 and 3 united, joints beyond cylindrical Pilinothrix Förster
Cup of scutellum rather large oval or ovate; first joint of flagellum not longer than the second . . . . . Cothonaspis Hartig
= Trybliographa Förster
106. Cup of scutellum normal or not ending in a spine 107
Cup of scutellum abnormal, ending in a strong spine Acantheucoela Ashmead
107. Cup of scutellum not large, either ovate or ellipzoidal with a fovea posteriorly 108
Cup of scutellum large broadly oval or rounded
First joint of the flagellum subclavate at least as long as the second Diranchis Förster